

## **ABSTRACT**

A method for compression of sonic log data includes sorting peak components in the sonic data; filtering the sorted peak components to remove high-frequency portions in the peak components; and decimating the filtered peak components according to a selected ratio to produce compressed data. A method for telemetry transmission of downhole sonic log data includes sorting peak components in the sonic log data; compressing the sorted peak components to produce compressed data; packing the compressed data to produce data packets for telemetry transmission; and sending the data packets where desired using telemetry.